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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/662,744	09/15/2003	Gin Wu	021218.0009US2	1532
34284	7590	05/08/2008	EXAMINER	
Rutan & Tucker, LLP. 611 ANTON BLVD SUITE 1400 COSTA MESA, CA 92626			MACNEILL, ELIZABETH	
			ART UNIT	PAPER NUMBER
			3767	
			MAIL DATE	DELIVERY MODE
			05/08/2008	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/662,744  
Filing Date: September 15, 2003  
Appellant(s): WU, GIN

\_\_\_\_\_  
Mei Tsang  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 7 April 2008 appealing from the Office action mailed 8 November 2007.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

5,560,373	De SANTIS	10-1996
5,261,818	SHAW	11-1993

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 14,15,17,18,22 and 23 are rejected under 35 U.S.C. 102(b) as being anticipated by De Santis (US 5,560,373)

De Santis teaches a drill bit with a shaft (12), a first opening (end of 13), a second opening (at the notch), a lumen (13), and a notch (46). Fig 7. The shaft is disposed in the hub (Fig 1).

2. Claims 14,15,17,19 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Shaw (US 5,261,818).

Shaw teaches a shaft (13) with a cutting surface (14), a lumen (18), with first (34) and second openings (22) and an open notch (26). Shaw also teaches a method of drilling through bone and injecting a substance through needle (Summary of the invention).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 16 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shaw.

Regarding claim 20, Shaw teaches the drill as above, but does not teach the length of the drill or the use of a hypodermic needle to inject the substance. It is well known in the art to provide medications in a hypodermic needle/syringe system and to inject the substance in the body. The lumen of the drill bit would be capable of use with a hypodermic needle and one of ordinary skill in the art at the time the invention was made would have expected the device to be used with a hypodermic needle.

Regarding claim 16, Shaw discloses the entire length of the drill is 20-25 mm (0.78-.98 inches). The drill bit is intended for use in the mouth of a human and therefore must meet some dimensional limits in order to be functional. Furthermore, the length of the notch is dependent on the tooth to be drilled. Teeth come in various sizes (different animals, children, variation within adults) and selecting the length of the notch would be within the skill of an ordinary worker in the art to optimize the function of the device.

#### **(10) Response to Argument**

##### **A. Rejection of claim 14,15,17,18,22, and 23 under 102(b) by De Santis**

Appellant first argues (bottom of page 6) that De Santis does not teach that the overall length of the notch is greater than the thickness of the tissue. It is the examiner's position that this is an intended use limitation and since the device can be used in essentially any tissue, including the extremely thin bones of the nose or ear, this is met by De Santis. Using the device of De Santis to extract a sample from the nose,

for example, could involve punching the drill bit all the way through the bone and still collecting a sample, along with some other tissues or simply air. This would not prevent collection of a sample. Next (top half of page 7) Appellant argues that De Santis is not capable of injecting a medication. First, the examiner notes that the step of injection is not recited in the claims until claim 19, which is NOT rejected by De Santis. To anticipate claim 14, which only recites injecting in the preamble of a device claim, the device of De Santis only must be capable of injecting. The drill bit of De Santis has a lumen which extends from a syringe (22) to the distal end of the needle. The open lumen coupled to a syringe indicates that the device is capable of injecting a medication. Appellant seems to argue that drilling and injecting must occur at the same time, but this limitation is not found in the claims.

**B. Rejection of claim 14,15,17,19 and 21 under 102(b) by Shaw**

1. Appellant argues that channels 26 are not notches. Appellant claims to have provided a special definition of "a small hole through the wall of the hollow drill." The examiner does not believe that there is a special definition of this phrase in the specification, however, to the extent that this constitutes a special definition, the device of Shaw meets this as shown in Figs 3-5, which show how the channels or bores (Col 2 line 50) are carved out of the wall of the hollow drill. Appellant's argument that the notch must be "punched" through the wall is not in the alleged definition.

2. Appellant argues that Shaw does not teach that the overall length of the notch is greater than the thickness of the tissue. The examiner believes this is an intended

use limitation and since the device can be used in essentially any tissue, including the bones of the nose or ear which are very thin, this is met by Shaw.

3. Appellant argues that opening 34 is not connected to the lumen 18. Appellant confuses "channel" (which is notch 26) with "lumen." Shaw teaches only one lumen, see Fig 6. Appellant's second argument, that debris cannot enter the lumen, is overcome once the meaning of channel versus lumen is explained.

**C. Rejection of claims 16 and 20 under 103(a) by Shaw**

As to claim 16, the examiner has explained that since the device of Shaw is designed for use in the mouth, there are certain inherent limitations that are required for maneuverability and ease of use. Teeth and mouths come in various sizes (different animals, children, variation within adults) and selecting the length of the notch would be within the skill of an ordinary worker in the art to optimize the function of the device.

Appellant does not specifically address claim 20.

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Elizabeth R MacNeill/

Examiner, Art Unit 3767

Art Unit: 3767

Conferees:

/Kevin C. Sirmons/

Supervisory Patent Examiner, Art Unit 3767

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TC 3700 TQAS